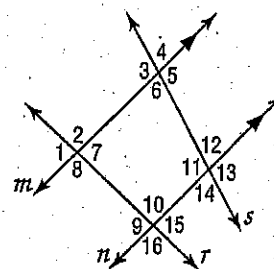


3-2 Practice

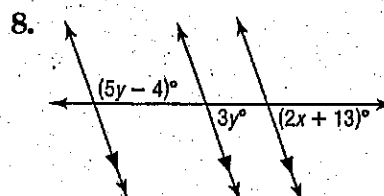
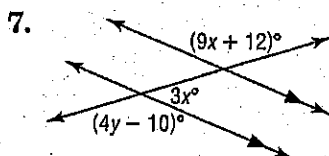
Angles and Parallel Lines

In the figure, $m\angle 2 = 92$ and $m\angle 12 = 74$. Find the measure of each angle.

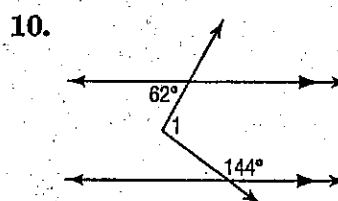
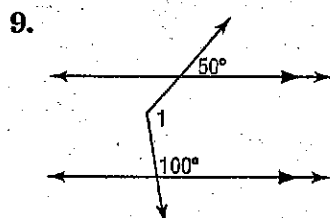
1. $\angle 10$
2. $\angle 8$
3. $\angle 9$
4. $\angle 5$
5. $\angle 11$
6. $\angle 13$



Find x and y in each figure.



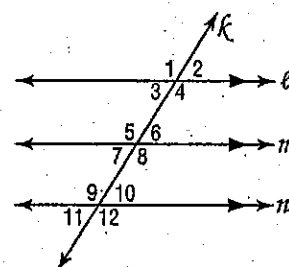
Find $m\angle 1$ in each figure.



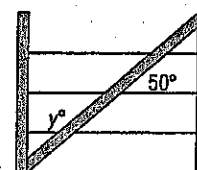
11. **PROOF** Write a paragraph proof of Theorem 3.3.

Given: $\ell \parallel m$, $m \parallel n$

Prove: $\angle 1 \cong \angle 12$



12. **FENCING** A diagonal brace strengthens the wire fence and prevents it from sagging. The brace makes a 50° angle with the wire as shown. Find y .



3-4

Skills Practice

Equations of Lines

Write an equation in slope-intercept form of the line having the given slope and y-intercept.

1. $m: -4$, y-intercept: 3

2. $m: 3$, y-intercept: -8

3. $m: \frac{3}{7}$, (0, 1)

4. $m: -\frac{2}{5}$, (0, -6)

Write equations in point-slope form and slope-intercept form of the line having the given slope and containing the given point.

5. $m: 2$, (5, 2)

6. $m: -3$, (2, -4)

7. $m: -\frac{1}{2}$, (-2 , 5)

8. $m: \frac{1}{3}$, (-3 , -8)

Write an equation in slope-intercept form for each line.

9. r

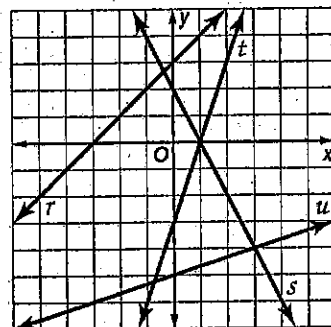
10. s

11. t

12. u

13. the line parallel to line r that contains (1, -1)

14. the line perpendicular to line s that contains (0, 0)



Write an equation in slope-intercept form for the line that satisfies the given conditions.

15. $m = 6$, y-intercept = -2

16. $m = -\frac{5}{3}$, y-intercept = 0

17. $m = -1$, contains (0, -6)

18. $m = 4$, contains (2, 5)

19. contains (2, 0) and (0, 10)

20. x-intercept is -2 , y-intercept is -1